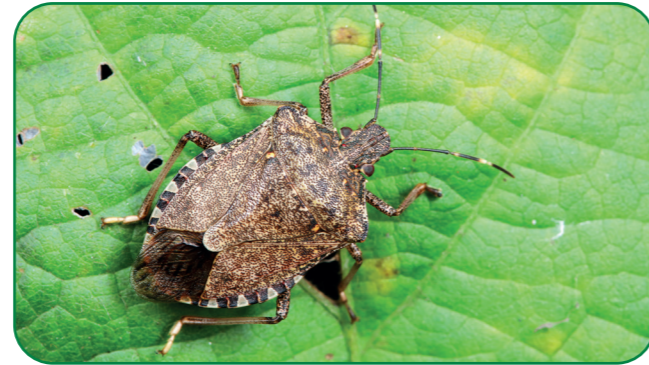


HOW TO USE

Install the traps starting from March / April. Place them outside at distance from the orchard to monitor, using a support pole (not supplied) or other support structures. It is recommended to place Shindo Trap in the farm areas most favorable to the development of *Halyomorpha halys*, such as the perimeter areas of crops located near hedges and buildings. Provide additional traps on any sides or points at risk. Replace both attractive lures 12 weeks after they are installed in the field.



Shindo Trap is the innovative trap developed by the AGROELECTRONICS department of CBC BIOGARD for the capture of *BMSB* (*Halyomorpha halys*) which combines classic pheromone/kairomone attraction with innovative vibrational attraction.

Pentatomids communicate between individuals of the same species also with vibrational signals that are perceived through the plants on which they live and move. The frequencies and the vibration sequences are specific for both sexes and species, this uniqueness allows them to recognize, locate and reproduce. The research conducted in collaboration with entomologists of the Edmund Mach Foundation of San Michele all'Adige - Trento allowed to decode portions of the vibrational language which, if effectively reproduced, generate attraction towards the source of the target insect.

Constant research has led to the identification of the best method to continuously and constantly reproduce the attractive communication signal identified.

The research focused on perfectly reproducing the natural signal of the insect with specific attention to remove all secondary and accidental frequency components.

Shindo Trap

Trap for catching adult and juvenile *BMSB* (*Halyomorpha halys*)
with vibration and pheromones

vibration + pheromone = fatal attraction

For more information:

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Manufactured by **BIOGARD** division of **CBC** (Europe) **S.r.l.**
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Shindo Trap

Trap for catching adult and juvenile *BMSB*
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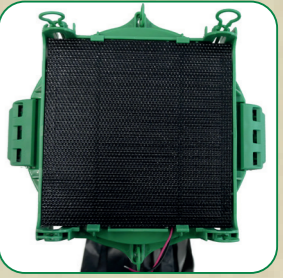




In temperate environments, this insect completes 2 cycles a year, while in the colder areas only one cycle. It winters as an adult inside natural or artificial shelters such as buildings. With spring, the adults come out of the winter diapause, moving on the vegetation to feed. It is a polyphagous insect that prefers flowers and fruit. After the first mating, between the beginning of May and the end of August the female lays the eggs on the lower page of the leaves. From the hatching of the eggs, 3 stages of nymph and 2 stages of nymph follow one another, until the appearance of adults. nymphs are unable to fly and move around while walking, while adults are able to fly.

fatal attraction

Solar panel for power supply of the electronic system that plays back the vibrational signal



Electronic transducer for the reproduction of the vibrational signal emitted by the females for the attraction of the male.



The two attractants are applied, below the opening at the base of the cylinder through the supplied metal wire.

DO NOT place the two attractants directly inside the cylinder.



vibration + pheromone

Shindo Trap has been specially designed to be simple to install, use and maintain over time. The innovative opening system allows you to leave the trap installed from the beginning until the end of the season without the need for complex operations to be carried out in the field. The practical emptying system makes it easy to eliminate captured insects. The quality of the materials used makes it suitable for multi-year use by observing the normal use and maintenance precautions reserved for similar products.



The trapping capacity is increased by the adoption of shattering plastics which, positioned in contact with the ground, guarantee a large landing surface for adults in flight and an easy path to follow to reach the peak of the vibration and enter the internal cylinder.

